

CORPORATE - POCATELLO OFFICE

June 12, 2015

Mary Kauffman Caribou-Targhee National Forest 1405 Hollipark Dr. Idaho Falls, Idaho 83401

Subject:

Biological Selenium Removal Treatment Technology

Fluidized Bed Bioreactor Pilot Study

May 2015 Progress Report

Dear Mary,

This progress report summarizes key activities in May 2015 associated with the fluidized bed bioreactor pilot study located near Hoopes Spring. This pilot study is being conducted as part of the Smoky Canyon Mine Remedial Investigation/Feasibility Study (RI/FS) to provide information on the effectiveness of the active biological treatment system in removing selenium and other COPCs from South Fork Sage Creek Springs and Hoopes Spring. Operation and monitoring of the pilot study follows the Pilot Study Work Plan and Sampling and Analysis Plan (Work Plan/SAP), Biological Selenium Removal Treatment Technology Fluidized Bed Bioreactor (prepared by Formation Environmental, dated September 2014, with revised text and tables dated March 5, 2015).

Activities at the treatability study pilot plant during May were primarily a continuation of troubleshooting the hydraulic deficiency from the aeration tank to the sand filter encountered in April. The plant was offline during the entire month of May while the sand in the sand filter was replaced, and a booster pump was installed between the aeration tank and the sand filter.

Identification of Deliverables and Data Transmittals

No analytical or field data were collected in May, and as of this report all outstanding laboratory data were received (the most recent results were submitted with the April monthly report).

Work Plan/SAP Addendum 01, which provides revisions to the monitoring frequency and analytical suites, was submitted electronically to the Forest Service for review on May 29, 2014.

Upcoming Activities

The following activities associated with the fluidized bed bioreactor pilot study are scheduled through July 2015:

- Restart of the pilot system is expected to occur during the week of June 15. The system will require a two-week startup phase to optimize the biological activity in the reactor.
- Monitoring according to the Work Plan/SAP is planned to start again in late June, pending approval of Work Plan/SAP Addendum 01.
- The small ultra-filtration/reverse osmosis (UF/RO) units are expected to be delivered to the mine in early July.
- A work plan will be prepared for the UF/RO "pilot-in-a-pilot", to test the functionality of ultra-filtration and reverse osmosis as a concentration step for future.

Please contact me if there are questions regarding this monthly progress report.

Sincerely,

Monty Johnson

Environmental Engineering Manager

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